UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,317	02/21/2002	Kuniaki Kurihara	09792909-5351	8182

26263 7590 12/28/2005

SONNENSCHEIN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER	
ADHAMI, MOHAMMAD SAJID	
ART UNIT	**PAPER NUMBER**
2662	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/080,317	KURIHARA, KUNIAKI	
	Examiner	Art Unit	
	Mohammad S. Adhami	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 May 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3 line 3, it is unclear whether "information" refers to "first information", "second information", or both. Additionally, it is unclear what the distinction between "first packets" and "second packets" is.

Claims 4 and 5 are rejected because they depend from claim 3.

3. Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 9-12, the claim language for the limitation starting with "second deletion" is confusing. It is unclear how the second deletion means operates.

4. Claims 9-12 recite the limitation "said first assembled packet" in claim 9, lines 17 and 18; in claims 10 and 11, lines 18 and 19; and in claim 12, lines 17 and 18. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton (US 6,392,993) in view of Schmidl (US App. 2002/0012337) and further in view of Orimo (US 5,666,484).

Re claims 1, and 6-8:

Hamilton discloses "first transmission means for transmitting first information to said transmission part via said network in said units" (Figure 8 reference 144 is a "transmission means" and reference 146 are "units").

Hamilton further discloses "receiving means for receiving, from said transmission party, receiving information about the reception of said first information transmitted by said first transmission means" (Figure 8 reference 144 is a "receiving means" and reference 154 is "receiving information").

Hamilton further discloses "determination means for determining whether or not the time clocked by said clocking means exceeds a reference value" (Figure 8 reference 158 is the "determination means" and Col.24 lines 27-29 "The value on the timer may be set to a particular length of time such that if the

message is not received within that particular length of time, the message is deleted" where "a particular length of time" is a "reference value").

Hamilton further discloses "second transmission means for retransmitting said first information when said determination means determines that the time clocked by said clocking means does not exceed said reference value... in a case where said received information received by said receiving means indicates that said transmission party has not yet received said first information."" (Abstract "The sending system tracks receipt of acknowledgements by intended recipient and retransmits any unacknowledged packets" where the retransmission of the first information only happens when the time does not exceed the reference value as shown above).

Hamilton does not explicitly disclose "transmitting second information when said determination means determines that the time clocked by said clocking means exceeds said reference value."

Schmidl discloses "transmitting second information when said determination means determines that the time clocked by said clocking means exceeds said reference value" (Paragraph [0070] "the counter...can also be incremented in response to a pre-determined time-out condition" where the time-out condition is when the time clocked "exceeds said reference value" and "the counter...[being] incremented, [moves] the pointer to select another data entry" where the "another data entry" is "second information").

Hamilton and Schmidl are analogous because they both pertain to data retransmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton as discussed above as taught by Schmidl in order to prevent halting transmission of subsequent data after an error occurs.

Hamilton further discloses "clocking means for clocking the time" (Figure 8 reference 158 where the time is a "clocking means").

Hamilton and Schmidl do not explicitly disclose "clocking the time from when said first information is transmitted."

Orimo discloses "clocking the time from when said first information is transmitted" (Figure 9 reference 431 where the timer is started when the information is transmitted in reference 432).

Hamilton, Schmidl, and Orimo are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton in view of Schmidl as discussed above as taught by Orimo in order to track the amount of time before message time-out should occur.

Re claim 2:

Hamilton discloses "wherein said units are packets" (Abstract "Packets are transmitted by the sending system").

Re claim 3 (as best understood):

Hamilton discloses "dividing means for dividing information for individual first packets into information for individual second packets, wherein said first and second transmission means transmit said information by using said second packets as units" (Fig.7 reference 124 where the "first packets" are messages and the "second packets" are the packets that make up the messages).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton in view of Schmidl in view of Orimo as applied to claim 3 above, and further in view of Tseung (US 5,109,384).

Re claim 4 (as best understood):

As discussed above, Hamilton in view of Schmidl and Orimo meets all the limitations of the parent claims.

Hamilton further discloses "setting means for setting a flag" (Abstract "The positive reliability mode...sets [a] flag in the packets transmitted" where the receiver may set the flag and Table 3 in Col.11 lines 43-60).

Hamilton in view of Schmidl and Orimo does not explicitly disclose "setting a flag indicating that the time clocked by said clocking means exceeds said reference value when determined by said determination means."

Tseung discloses "setting a flag indicating that the time clocked by said clocking means exceeds said reference value when determined by said determination means" (Col.22 lines 62 and 63 "The timer would expire (the ACK

timer expired on network B flag 866 would be set) and " where the timer expires after a "reference value" is exceeded).

Hamilton, Schmidl, Orimo, and Tseung are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton in view of Schmidl and Orimo as taught by Tseung in order to make appropriate data processing decisions regarding the communication of multi-packet messages.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton in view of Schmidl, Orimo, and Tseung as applied to claim 4 above, and further in view of Kamihara (US 6,854,020,).

Re claim 5 (as best understood):

As discussed above, Hamilton in view of Schmidl, Orimo, and Tseung meets all the limitations of the parent claims.

Hamilton further discloses "writing means for writing said flag into second information which is transmitted by said second transmission means when said flag is set by said setting means" (Abstract "The positive reliability mode...sets [a]...flag in the packets transmitted" where setting the flag in the packets involves "writing" the flag and Table 3 in Col.11 lines 43-60).

Hamilton in view of Schmidl, Orimo, and Tseung does not explicitly disclose "clearing means for clearing said flag when all of said second packets which form one of said first packets are transmitted to said transmission party."

Kamihara discloses "clearing means for clearing said flag when all of said second packets which form one of said first packets are transmitted to said transmission party" (Col3 lines 55 and 56 "clearing the transmission-in-progress flag on condition that packet transmission has ended" where after the transmission is complete, a flag is cleared).

Hamilton, Schmidl, Orimo, Tseung, and Kamihara are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton in view of Schmidl, Orimo, and Tseung as discussed above as taught by Kamihara in order to make appropriate data processing decisions regarding the communication of multi-packet messages.

9. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton in view of Knobel (US 6,765,871).

Re claims 9-12 (as best understood):

Hamilton discloses "receiving means for receiving said information transmitted for each of said second packets via said network" (Figure 8 reference 148).

Hamilton further discloses "storage means for storing, for each of said first corresponding packets, information for each of said second packets received by said receiving means" (Figure 8 reference 150 and Col.19 lines 32-37 "Since messages may have to be buffered until all packets are received, embodiments within the scope of this invention may comprise means for storing received

packets until an entire message is received...such means is illustrated by message receive list 150").

Hamilton further discloses "assembling means for assembling information for each of said second packets stored in said storage means into information for each of said first packets before being divided" (Figure 8 reference 148 and Col.19 lines 29 and 30 "Normal processing of receiver 148 comprises assembling packets of a message").

Hamilton further discloses "determination means for determining whether or not a predetermined flag is contained in the information received by said receiving means" (Col.30 lines 64-66 "decision block 230 and step 232 which detected whether the ACK request flag is set" or Col.12 lines 50-52 "By examining the packet sequence number and, perhaps, the end of the message flag").

Hamilton further discloses "second deletion means for deleting said second packet, stored in said storage means, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination means determines that said flag is contained in the information received by said receiving means" (Col.24 lines 6-9 "If the entire message has not been received before the timer expires, then message life timer 158 may delete the partially received message" where as disclosed by the applicant in Figure 4, the flag is set when a packet that is to be transmitted, is processed after a reference time. So the "second packet" deleted

is the packet corresponding to a message that was not entirely sent before the reference time. This is the same as deleting a partial message, which is composed of "second packets", that is not received within the reference time).

Hamilton discloses buffering packets *until* they are all received (Col.19 lines 32 and 33 "messages may have to be buffered until all packets are received"). However, Hamilton does not explicitly disclose a deletion means.

Knobel discloses a "first deletion means for deleting said second packet stored in said storage means, corresponding to said first assembled packet when said second packet is assembled into said first corresponding packet by said assembling means" (Col.5 lines 47-51 "When a data frame has been sent to the buffer (i.e. a complete frame)...the other side [of the buffer] removes a complete frame" where a complete frame corresponds to the "first corresponding packet").

Hamilton and Knobel are analogous because they both pertain to data communications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton as discussed above as taught by Knobel in order to efficiently utilize memory.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takeda (US 6,483,845) and Gibson (US 6,895,019) show sending information after a reference time has passed. Chu (US 6,721,707) shows

setting a flag after a reference time has passed. Houde (US 5,797,094) and Georgiou (US 5,285,449) show clearing a flag after a message transmission is complete.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad S. Adhami whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSA 12/15/2005

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600